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RESEARCH ARTICLE

FORMATION OF A MECHANISM FOR MANAGING PLATFORM RELATIONS BETWEEN RUSSIA AND CHINA (A CYBERNETIC APPROACH)

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ABSTRACT

Introduction. The sanctions pressure on Russia and China is stimulating increased cooperation between these two countries. There have been both qualitative and quantitative changes in the Russian market, which resulted in the withdrawal of a number of foreign companies from the market, and foreign economic relations have shifted from the EU countries to the East. The modern development of digital platforms, ecosystems and digital services has led to the fact that the modern economy has actually become a platform type. A digital platform in a broad sense can be considered as a digital form of organization of relations between platform operators, suppliers and consumers, as well as the procedure for regulating these relations.

The purpose of the study is to propose an original mechanism for managing platform relations between Russia and China based on a cybernetic approach. The main objectives of the research are: to analyze the degree of scientific development of platform relations and cross-border cooperation between Russia and China in the context of the formation of a digital economic model; to develop an original mechanism for managing platform relations between Russia and China, as well as a mechanism for legal regulation of platform relations.

Materials and methods. The research methodology includes analysis, as well as systemic and cybernetic approaches to modeling the mechanism of regulating platform relations.

The theoretical foundation of the research draws upon a wide range of scholarly works by both Russian and international authors. These include studies focused on the evolution of bilateral relations between Russia and China, as well as research examining the development of the platform economy in the context of digital transformation. These works provide a conceptual basis for analyzing emerging trends in cross-border digital cooperation and informs the development of practical models for regulating platform-based interactions in the contemporary economic landscape.

Results and conclusions. The authors propose a cybernetic approach to the formalization and modeling of mechanisms, both in the theoretical aspect and in relation to platform relations. The cybernetic approach makes it possible to model mechanisms in complex dynamic systems in order to solve specific legal problems.

Discussion. The results obtained can be applied in practice in the development of trade and economic relations between Russia and China in the context of permanent transformation processes and sanctions pressure from a number of foreign countries, as well as in scientific activities in such areas as: 1) conducting further research on the platform economy in the context of cross-border trade; 2) supplementing the theoretical basis for the study of platform economies; 3) the proposal of an original methodological toolkit that makes it possible to assess the effectiveness of cross-border cooperation in the context of the development of the platform economy.

KEYWORDS

Management mechanism, platform relations, cybernetic approach, digital platforms, Russia, China, cross-border cooperation.

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ИССЛЕДОВАТЕЛЬСКАЯ СТАТЬЯ

ФОРМИРОВАНИЕ МЕХАНИЗМА УПРАВЛЕНИЯ ПЛАТФОРМЕННЫМИ ОТНОШЕНИЯМИ РОССИИ И КИТАЯ (КИБЕРНЕТИЧЕСКИЙ ПОДХОД)

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РИДИТОННА

Введение. Санкционное давление на Россию и Китай стимулирует усиление сотрудничества между этими двумя странами. На российском рынке произошли как качественные, так и количественные изменения, что выразилось в уходе с рынка ряда зарубежных компаний, а внешнеэкономические связи перестроились со стран Евросоюза на Восток. Современное развитие цифровых платформ, экосистем и цифровых сервисов привело к тому, что современная экономика по факту стала экономикой платформенного типа. Цифровую платформу в широком понимании можно рассматривать как цифровую форму организации отношений между операторами платформ, поставщиками и потребителями, а также порядок регулирования этих отношений.

Целью исследования является предложение оригинального механизма управления платформенными отношениями России и Китая на основе кибернетического подхода. Основными задачами исследования являются: проведение анализа степени научной разработанности платформенных отношений и трансграничного сотрудничества России и Китая в условиях формирования цифровой модели экономики; разработка оригинального механизма управления платформенными отношениями России и Китая, а также механизма правового регулирования платформенных отношений.

Материалы и методы. Методологией исследования являются анализ, а также системный и кибернетический подходы к моделированию механизма регулирования платформенных отношений. Теоретической базой исследования послужили труды отечественных и зарубежных авторов, посвященные развитию взаимоотношений России и Китая, а также развитию платформенной экономики в условиях цифровой трансформации.

Результаты. Авторами предлагается оригинальный механизм управления платформенными отношениями России и Китая в условиях развития платформенной экономики и усиления санкционного давления со стороны ряда зарубежных стран и объединений.

Обсуждение. Полученные результаты могут найти свое применение в практической деятельности при развитии торгово-экономических отношений России и Китая в условиях перманентных трансформационных процессов и санкционного давления ряда зарубежных стран, а также в научной деятельности по таким направлениям, как: 1) проведение дальнейших исследований платформенной экономики в контексте трансграничной торговли; 2) дополнение теоретического базиса исследования платформенной экономики; 3) предложение оригинального методического инструментария, позволяющего оценивать эффективность трансграничного сотрудничества в условиях развития платформенной экономики.

КЛЮЧЕВЫЕ СЛОВА

Механизм управления, платформенные отношения, кибернетический подход, цифровые платформы, Россия, Китай, трансграничное сотрудничество.

ВКЛАД АВТОРОВ

Все авторы участвовали в разработке концепции исследования, сбора, обработки и анализа данных, написании текста рукописи, формулировке выводов.

ДЛЯ ЦИТИРОВАНИЯ

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■ INTRODUCTION

At the present stage, platform relations are actively developing in both countries. For example, in the Russian Federation, there is now not only the introduction of the platforms themselves into the life of society, but also close attention to the legal regulation of the interaction of participants on these platforms. Thus, among the most significant issues are consumer protection in the implementation of purchase and sale transactions on digital platforms, including products that are relatively non-certified and dangerous to life and health, and the regulation of labor relations among employees operating on various platforms. In addition, issues of

convenience and clarity of services for users of platforms are becoming important, which will contribute to the growth of demand for digital services on platforms, respectively, increasing the share of platform economies in the country's macroeconomic indicators.

Given the growing popularity of the platform economy among market participants and the government's close attention to it, it is necessary not only to assess the current state of affairs but also to develop effective and relevant mechanisms for managing platform relations.

Another important aspect is the development of cross-border trade, including in the digital space.

In recent years, the global political and economic landscape has undergone profound transformations, where rapid integration of digital technologies into national economies, sanctions and restrictions imposed by certain countries, and ongoing evolution of a multipolar international order are the most important ones. For the Russian Federation, these dynamics have catalyzed a notable pivot toward strengthening ties with neighboring states, with a special emphasis on enhancing bilateral relations with the People's Republic of China.

From the point of view of economic cooperation, the sanctions pressure and the geopolitical situation are encouraging Russia to diversify its markets by reorienting its export-import relations towards China. This measure helps to compensate for the losses incurred due to reduced cooperation with European countries.

Additionally, the development of trade relations with China contributes to the growth of transport infrastructure and the development of the Siberian and Far Eastern regions. It is worth noting that with the growth of the digital segment of cross-border trade, the impact of the territorial aspect, given the vastness of the Russian Federation, is being mitigated.

At the same time, cooperation with China helps to strengthen Russia's position on the global stage, which is particularly important in the current situation of sanctions and attempts to isolate Russia. Joint projects between Russia and China in the fields of energy, transportation, agriculture, and high technology have a positive impact on the position of Russian companies in the international market, increasing their competitiveness.

The expanding cooperation between Russia and China reflects a long-term strategic partnership that spans economic, military, technological, and cultural domains. This collaboration is a powerful balancing factor in shaping a multipolar world. Another most promising and rapidly developing area of this bilateral engagement is in the digital domain. The digitization of the economies of both Russia and China encompasses electronic commerce, digital finance, artificial intelligence and data management.

The formation of digital models of national economies is one of the most important factors in the development of countries at the current stage. It is through the effective use of advanced technologies that competitiveness and well-being are ensured at the corporate, industry, national, and global levels.

The key advantages of digital transformation include increased labor productivity, changes in the economic architecture, increased flexibility and adaptability of the business sector, which is particularly important in a constantly changing environment, expanded geographical reach and target audience, and effective collaboration between government agencies and the business sector.

Regarding the latter point, it should be noted that Russia and China are actively switching to digital formats of interaction with the population and the business sector, and simplifying the procedures for quality control of the services provided.

The scientific novelty of this research lies in its proposal of an original framework for managing platform-based relations between Russia and China highlighting strategic, regulatory, and technological dimensions. This is particularly relevant in the context of increasing global pressure on Russia and China through sanctions and restrictions on technology transfer. The development of such digital platforms is a crucial strategy for ensuring economic security, maintaining political stability, and enhancing citizen welfare.

The results obtained can be applied in practice in the development of trade and economic relations between Russia and China in the context of permanent transformation processes and sanctions pressure from a number of foreign countries, as well as in scientific activities in such areas as: 1) conducting further research on the platform economy in the context of cross-border trade; 2) supplementing the theoretical basis for the study of platform economies; 3) the proposal of an original methodological toolkit that makes it possible to assess the effectiveness of cross-border cooperation in the context of the development of the platform economy.

■ MATERIALS AND METHODS

The methodological framework of this study is grounded in analytical and classification methods, as well as in the application of systems theory and the cybernetic approach to modeling regulatory mechanisms for platform-based relations. These approaches are particularly suited to examining the complex and dynamic nature of digital platforms, enabling the identification and structuring of interrelated components within platform ecosystems and facilitating the design of effective governance models.

The theoretical foundation of the research draws upon a wide range of scholarly works by both Russian and international authors. These include studies focused on the evolution of bilateral relations between Russia and China, as well as research examining the development of the platform economy in the context of digital transformation. These works provide a conceptual basis for analyzing emerging trends in cross-border digital cooperation and informs the development of practical models for regulating platform-based interactions in the contemporary economic landscape.

The choice of scientific papers is based on the credibility of the authors, as well as the importance of the proposed scientific provisions. Taken together, these works allowed us to form a theoretical platform that takes into account the existing views of scientists from both Russia and China and, subsequently, provided the authors with the opportunity to identify insufficient areas of research. In particular, it is necessary to propose a mechanism for managing platform relations based on a cybernetic approach, as well as a mechanism for legal regulation of platform relations.

FINDINGS

When considering the development of platform relations between Russia and China, it is important for us to take into account the views of not only Russian, but also Chinese scientists who are conducting research in the field of cross-border trade. The development of a competitive environment and a platform economy.

In analyzing the degree of scholarly elaboration on the subject, the authors note the following studies.

A study published in 2022 presents a comprehensive examination of the platform economy phenomenon. Considering the fact, that the platform economy experienced accelerated development and gained structural complexity during the pandemic, the authors emphasize the importance of establishing a new paradigm for researching platform economy in the context of an emerging multipolar world [1].

Shen Ya.'s research focuses on data management policy in China within the framework of the platform economy. The author analyzes its development, identifies current challenges, and proposes the establishment of a dedicated data management authority to coordinate data governance issues [2].

The evolution of a competitive digital environment in China is addressed in several studies of 2022. For instance, one research work presents an analysis of antitrust regulation in China's platform economy using the case of Alibaba, the country's largest online platform operator [3]. Similarly, S. Marco Colino, who examines antitrust issues, identifies potential regulatory risks and suggests appropriate response measures [4].

While the development of the platform economy and the formation of ecosystems bring notable advantages, they are also associated with certain risks. One such risk is market monopolization driven by the expansion of ecosystems. A team of researchers from the Financial University under the Government of the Russian Federation identified the synergistic interdependence among certain products by different digital companies [5].

In their study, K. Yang, L. Qian, and H. Zhao analyzed data collected from 384 participants across two of China's largest digital platforms and concluded that both contract completeness and digital technology management independently improved financial performance. Moreover, digital technology management strengthened the positive impact of contract completeness, though not contract enforcement, on financial outcomes [6].

R. Tarpey, J. Yue, Y. Zhang, and J. Zhang compared three contract types aimed at profit optimization for service providers operating on digital platforms. The importance of cooperation between service companies and digital platforms is widely acknowledged. The authors investigate three types of contracts (fixed-cost contracts, cost-sharing contracts, and profit-sharing contracts) between service companies (e.g., hotels) and digital platforms in a highly fragmented service supply chain to determine which contract type optimizes profits [7].

Another study examines the cooperative relationships between platform owners and complementary companies in the related markets. Based on co-participation theory, the authors explore the evolutionary trends of cooperation between platform owners and complementary companies and the key influencing factors [8].

With respect to the Russian economy, V. I. Blanutsa identifies several risks for the Siberian and Far Eastern federal districts associated with the development of the platform economy (including the concentration of platform companies in the capital of Russia, economic polarization, regional labor market transformation, increased migration flows, and the chaotic spatial diffusion of innovations) [9].

L. P. Dashkov and V. I. Puchkov highlight the lack of effective international and national regulatory frameworks that allow for transparent oversight and governance of the platform economy and platform-based employment [10].

A. N. Bryntsev and E. V. Levina, based on their research findings, identify the specific features of the digital economy emergence and define the role of digital platforms in economic activities of commercial entities [11].

As can be seen, the works examine various aspects of the platform economy. At the same time, the development of the digital economy and intergovernmental relations is based on a set of tools and institutions that form a regulatory mechanism.

Research into economic mechanisms has long held scientific interest, which can be evidenced by the following fact. As of January 2025, the E-library database lists over 27,000 articles in academic journals under the query of «mechanism» within the field of «Economics and Economic Sciences.»

Considering the still-forming research paradigm of the digital economy and, in particular, platform relations, the development of a theoretical approach to a platform relations mechanism becomes highly relevant. One such approach considered by the authors is the cybernetic approach, which they apply to studying the regulatory mechanisms in platform relations between Russia and China. This approach examines mechanisms as components of complex dynamic systems, aiming to optimize and enhance the efficiency of management processes in solving specific tasks. The national economies of many countries have already transitioned to a platform-based model, as evidenced by the development of innovative digital technologies and business models. Digital platforms, in turn, have transformed from websites or digital services into governmental institutions that facilitate and improve relationships among participants. Despite the diversity of definitions, platforms can broadly be understood as a digital form of organizing societal relationships among platform operators, suppliers, and consumers, with the regulatory framework governing these interactions.

In late 2024, the President of the Russian Federation, V. V. Putin, approved a list of directives,

including an instruction to the Government of the Russian Federation, in cooperation with PJSC Sberbank of Russia, to ensure further collaboration with China in conducting both technological research and development in the field of artificial intelligence¹.

Digital technologies are transforming the tools used in these processes, further reinforcing the need for developing a regulatory mechanism for platform relations.

Next, we will essential to outline the key trends in the development of cross-border trade between Russia and China (Figures 1 and 2). As illustrated in Figure 1, trade turnover between the Russian Federation and the People's Republic of China has shown a positive trend, particularly accelerating from 2021 onward. In 2015, the volume of bilateral trade was recorded at USD 68.06 bn. By 2021, this figure had increased to USD 146.89 bn, and further surged to USD 240.11 bn in 2023. Notably, since 2018, China's imports from Russia have consistently surpassed its exports to Russia, indicating the deepening economic interdependence and a potentially favorable shift in Russia's trade balance with China.

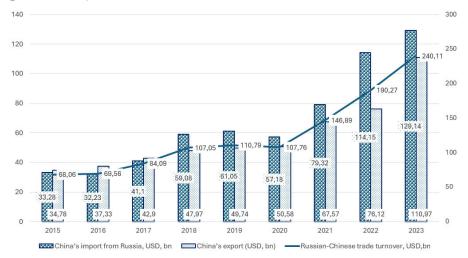


Figure 1 – Dynamics of Russia–China Trade, 2015–2023, USD bn²

A more detailed analysis of bilateral trade dynamics, focusing on the period from 2010 to 2023, reveals a marked increase in the share of each country in the other's external trade structure. Regarding China's trade with Russia, Russia's share in China's total imports rose from 1.86% in 2010 to 5.05% in 2023. In terms of exports, China's shipments to Russia grew from 1.88% of total Chinese exports in 2010 to 3.28% in 2023. Overall, Russia's share in China's total foreign trade increased from 1.86% to 4.04% over this thirteen-year period.

As for the economy of the Russian Federation, it demonstrates a significantly higher level of dependency on trade with China. The share of Chinese goods in Russia's total imports grew from 17% in 2010 to 39% in 2023. Although a slight decline was observed in 2022, the general trend in China's share of Russian exports remains positive, increasing from 5.1% in 2010 to 28% in 2023. So, the overall proportion of trade with China in Russia's foreign trade has grown from 9.5% in 2010 to 33% in 2023.

Given the diverse array of scholarly approaches to researching mechanisms, such as structural, informational, functional, and combined, in their analysis of the regulatory mechanism governing platform relations between Russia and China the authors adopt the evolving cybernetic approach.

Within the framework of the cybernetic approach, the mechanism is divided into three subsystems: the control subsystem (management), the execution or communication subsystem (controlled), and the object of management. This approach allows for the construction of a formalized model of the mechanism [12].

In legal literature, elements of the aforementioned approaches are also applied in studying legal mechanisms. Here, legal mechanisms are understood as legal procedures [13], methods and instruments of law [14], as well as legal principles and methods of legal influence. Mechanisms or their elements may also include legal norms, facts, relationships, law enforcement practices, and acts of obligations and rights implementation.

From an economic perspective, the authors particularly highlight the following researchers.

C. Mengyuan, L. V. Iushkova and A. A. Stupina note the rapid digital transformation of the Chinese economy, as well as in relation to light industry, Russia and China have a need to develop cross-border trade using platform relations technologies. The authors single out the spread of digital e-commerce platform applications as one of the most significant factors in the development of cross-border trade [15].

The authors focus on significance and specificity of the platform economy, which is reshaping

¹ A list of instructions following the conference «Journey into the World of Artificial Intelligence» // Official Website of the President of Russia, 30.12.2024. – URL: http://www.kremlin.ru/acts/assignments/orders/76076 (accessed 01.01.2025).

² Compiled by the authors using data from: «Key Trends in the Development of Russia–China Trade» // Official website of the Russian International Affairs Council, 13.09.2024. – URL: https://russiancouncil.ru/analytics-and-comments/analytics/ob-osnovnykh-trendakh-razvitiya-torgovli-rossii-i-kitaya/?sphrase_id=171756318 (accessed 15.01.2025).

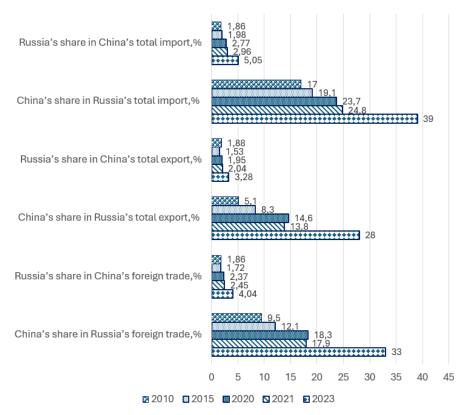


Figure 2 – Dynamics of the share of each country in the other's foreign trade, %³

economic activity, and examines the characteristics and development trends of digital platforms in China's public sector [16].

In his study, Wang G. analyzes the development status and legal regulation of digital financial platforms, a critical component of the platform economy, under Chinese law [17].

In addition, the need for further research and improvement of the platform economy is emphasized, especially considering the integration of big data and artificial intelligence [18].

D. N. Ermakov, N. V. Symanyuk, and Xi C. examined existing mechanisms for countering economic sanctions in Russia and China [19].

In their research on Russia-China trade cooperation, the authors identify priority areas, including the conclusion and execution of foreign trade transactions involving additional commitments whereby exporters agree to purchase specified goods or services from importers, and vice versa [20, p. 91].

The accelerating pace of digitalization influences the speed of export-import transactions and significantly expands the range of participants involved in cross-border trade. On the one hand, this facilitates the development of platform solutions; on the other, it creates prerequisites for monopolization of trade between countries. Therefore, as the authors note, it is essential to address the fundamental regulatory challenges of this new field of international cooperation [21].

Overall, the authors observe that a unified formalized approach to the concept and structure of mechanisms is still underdeveloped in the research literature. This is partly due to the absence of a generally accepted classification of mechanisms, as well as the emergence of new interaction models and tools.

In general terms, platform relations refer to interactions that arise both in the use of the functionality of digital platforms on the internet – between their owners, participants, and users – and outside of it.

Figure 3 provides graphical representation of the types of platform-based relations.

The significance of the developing platform relationships is also evidenced by the findings of the research work conducted by Popov E.V. and colleagues. These indicate that «the use of digital platforms leads to positive transactional effects: increased number of counterparties by 50-100 companies on average, intensified sales volume by 11-25%, reduction in risks associated with counterparties by 11-15%, and decreased costs related to inter-company interactions by 11-15%» [22, p. 152].

Thus, the authors propose an original mechanism for managing the platform relations between Russia and China, which is based not only on the results of the analysis of available academic works but also on the development of the platform economy, the intensification of sanction pressures from several foreign countries and organizations.

³ Compiled by the authors using data from: «On the Main Trends in the Development of Trade between Russia and China» // Official website of the Russian International Affairs Council. 13.09.2024). – URL: https://russiancouncil.ru/analytics-and-comments/analytics/obosnovnykh-trendakh-razvitiya-torgovli-rossii-i-kitaya/?sphrase_id=171756318 (accessed 15.01.2025).

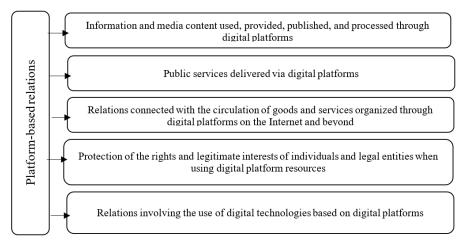


Figure 3 – Types of platform-based relations⁴

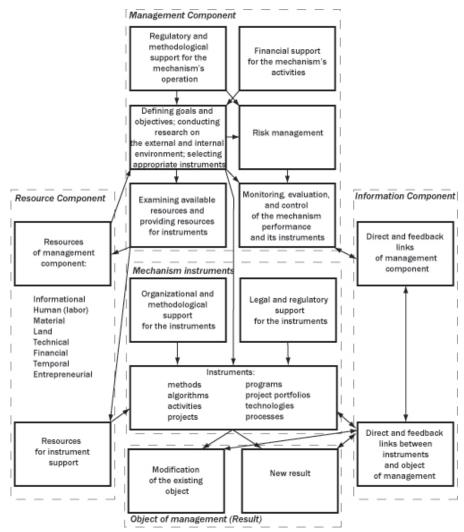


Figure 4 – Mechanism for managing platform-based relations (cybernetic approach)⁵

Let us define the mechanism for managing platform relations from a position of a cybernetic approach.

The mechanism for managing platform relations refers to a system of elements (management, legal, regulatory tools, informational, guarantee and sanction systems, and resources) used to achieve goals related to the creation or modification of the subject/object of management and the regulation of relationships that arise between or within digital platforms.

Figure 4 presents the overall structure of the mechanism for managing platform-based relations.

Digital technologies are evolving and being integrated into various economic processes. Consequently,

⁴ Compiled by the authors.

⁵ Compiled by the authors.

to ensure the efficiency and competitiveness of the economy, it is necessary not only to monitor innovations but also to incorporate them into activities, considering their security and alignment with national objectives. Therefore, the most significant task is the development of a mechanism for managing platform relations to ensure the interaction of digital platforms between Russia and China. This will facilitate transactions, including those in national digital currencies, insurance, and the conclusion of contracts based on smart contracts. Furthermore, the use of artificial intelligence to draft and monitor the implementation

of smart contracts, as well as in mutual settlements, is under consideration. Given the increasing share of payments between Russia and China in national currencies, the use of the digital ruble and digital yuan holds considerable promise. Interaction between participants will take place through the individual accounts of project participants.

Figure 5 demonstrates the mechanism for the legal regulation of platform-based relations. As can be seen, the legal regulation mechanism falls into 'management component' and the 'mechanism instrument' blocks of Figure 4.

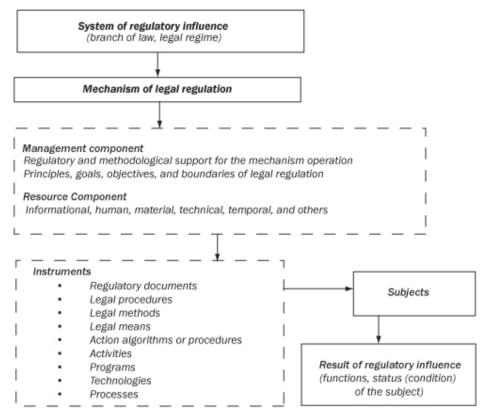


Figure 5 – Mechanism for legal regulation of platform-based relations⁶

The characteristics of the subjects of the legal regulation mechanism for platform-based relations:

1. Digital platform regulator

The role of the digital platform regulator is to establish rules for regulating platform relations that emerge between manufacturers and consumers of goods, works, and services, ensuring the functioning of an effective mechanism for judicial and extra-judicial consumer protection, as well as performing other functions [23].

2. Digital platform operator

A digital platform operator is an information intermediary who enters into commercial relations with consumers, either as a supplier/buyer of goods and services or as a trade organizer. For certain types of platform relations, in particular those related to information, the relationships between the operator and consumers may be non-commercial.

Platform operators ensure the protection of personal data, maintain statistics, report, bear the responsibility for the presence of prohibited goods and services on the digital platform, and set requirements for platform participants.

2.2. Digital platform operator – participant in trade circulation

In this case, the goal of management is to expand the legal regulation of goods and services offered through the platform. Operators or platform owners are responsible for the quality of goods and

A. V. Altukhov and S. Yu. Kashkin note that the digital platform operator defines the procedure for granting/restricting access to the platform, based on a set of legal norms governing the management of content placed on the digital platform, with due consideration for intellectual property protection and preventing the spread of unacceptable information [24].

⁶ Compiled by the authors.

services supplied via their platform, just like sellers or suppliers.

2.3. Digital platform operator – organizer of trade circulation

Their main function is to engage in non-commercial activities aimed at assisting entrepreneurs in promoting goods from manufacturers to consumers [25].

3. Payment system of the platform

Platform relations connected with payment systems arise between participants of the civil circulation when financial transactions or other actions involving money or its equivalents are required. Notably, one participant is always a specialized organization engaged in financial services and licensed by the Bank of Russia [23].

4. Participants of platform-based relations

Civil platform legal relations may arise between a limited circle of subjects and/or users/suppliers within the digital platform or among a large number of subjects and the platform operator, who acts as one of the parties to the legal relations.

It is important to note that within the frames of a digital platform, there is no need for distinguishing between wholesale and retail trade.

5. Industry associations or self-regulating organizations

Regulation in the form of self-regulating organizations is a type of corporate governance aimed at standardizing, controlling, and coordinating the activities of all its members. The norms and rules developed by self-regulatory organizations are intended to supplement and detail state regulation norms, reducing various types of risks.

In the authors' opinion, further work is needed to establish self-regulatory organizations for digital platforms in the commodity and service markets. This would enable the development of detailed regulations for managing platform relations specific to each type of digital platform and create unified approaches to the content of user agreements. Such measures are especially relevant for cross-border trade and the need to formalize the rights and obligations of buying and selling participants in the digital space.

6. Special subjects of platform-based relations

In addition to the subjects mentioned above, special subjects of platform-based relations include:

- hosting providers who use their resources to place the digital platform's software for online operation and/or access to the Internet, as well as the platform's databases.
- owner of the digital platform's domain name, registered in RU-CENTER. The domain name defines the address of the digital platform on the Internet and is leased from nic.ru, representing an independent object of civil legal relations.
- owner of the digital platform an individual or legal entity (sole proprietor) possessing property rights to computing equipment and intellectual property rights to software, databases, and other

technologies necessary for the platform's operation. The rights and obligations of the platform owner and the platform operator can belong to the same subject.

It is possible that special subjects' functions overlap: the owner of the digital platform and the domain name owner, or the hosting provider, domain name owner and platform operator may all be the same legal entity (sole proprietor).

Regulation goals and key areas of platform relations:

1. Antitrust regulation.

One of the main objectives of the legal mechanism for platform relations is to regulate responsibility for monopolistic actions and violations of fair competition rules.

The state tasks in antitrust regulation within the digital platform sector are to protect competition among national producers of goods, works, and services and limit the economic power of transnational digital platforms. A key goal of antitrust regulation is to foster competition between national digital platforms and limit their mergers and acquisitions.

The object of antitrust regulation is the competitive environment: the market structure in which digital platforms operate, the mechanisms of interaction between digital platforms, and platform operators' behavior.

The types of antitrust regulation methods applied to the activities of digital platforms include economic and administrative measures. Economic methods encompass actions such as programming and incentivizing processes of demonopolization and the competition development, as well as reducing entry barriers for new market participants [23].

In turn, administrative regulation methods are applied in the form of monitoring compliance with antitrust legislation, with the aim to exert regulatory influence on the competitive environment within digital platforms. Such methods include antitrust restrictions, suppression of unfair competition, control over market concentration, and others.

2. Financial, credit, payment relations, and services.

The Bank of Russia should govern the regulation of financial and credit relations, based on a registry of digital platforms providing payment or other financial services, with subsequent reporting to the Bank of Russia and the Federal Tax Service. It is necessary to establish a mechanism to restrict transactions involving minors for digital platform operators, along with other limitations in accordance with the current legislation.

3. Specific features of regulating open and closed digital platforms.

Closed digital platforms allow restricted access to the placement (receipt, processing) of information, with access requirements determined by the platform operator. The operator of a closed platform is a party to the agreement, and bears vicarious liability for the transactions conducted on the platform. Open digital platforms provide unrestricted access to the placement (receipt, processing) of information on the platform, in accordance with established standards and user agreements. A digital platform operator is considered to be a trade organizer. If the operator acts also as a participant in trade, it is necessary to apply the regulatory norms governing closed digital platforms. Standardized forms of user agreements and operational standards should be approved by the established self-regulatory organizations of digital platform operators.

4. Specific features of regulating the activities of digital platform operators

It is necessary to address such issues as tax regulation for digital platform entities and the creation of mechanisms for dispute resolution. Digital platforms should display the logo of a self-regulatory organization of digital platform operators on their homepage, with the possibility of accessing and verifying the contact details of current participants in platform relations, their email address and details of the operator of the digital (online) platform.

- 5. Specific features of regulating user agreements, intellectual property rights management, and copyright protection.
- A. V. Altukhov and S. Yu. Kashkin note that user agreements are the primary mechanism for

coordinating relations within digital platforms, which represents, on the one hand, specificity, and on the other hand, the complexity of regulating platform relations [24]. Requirements for the content of user agreements should be guided by standards and instructions of self-regulatory organizations of digital platform operators.

6. Specific features of the public services regulation. When providing public services through a digital platform, it is essential to ensure cybersecurity and the protection of citizens' personal data. Challenges may arise from the lack of professional competencies among personnel and insufficient political (administrative) support. Public services can facilitate the implementation of governmental functions across various sectors of administration. It is necessary to guarantee equal access to resources for all sectoral participants with transparent and comprehensible rules and criteria for access to the digital platform. Additionally, disciplinary and civil liability should be established for delays and poor quality in the delivery of services via digital platforms.

7. Regulation of relations involving goods and services circulation, and the consumer interests protection.

This framework considers three main groups of consumer rights. (Figure 6).

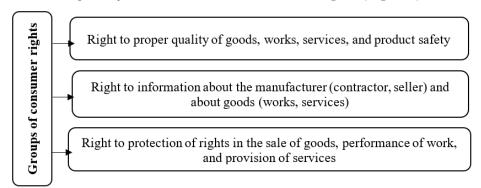


Figure 6 – Groups of consumer rights according to modern international standards⁷

8. Regulation of relations involving the use of digital technologies such as artificial intelligence, the internet of things, neural networks, unmanned systems, and others.

It is noted, that maintaining legal order in the use of digital technologies is based on the implementation of a set of legal norms. On the one hand, these include rules governing human interaction with artificial systems and, on the other hand, define a range of criteria according to which digital technologies must not have a harmful impact on human life, and must ensure the safety of public relations and state activities [26].

9. Platform-based employment

According to the Institute for Social Policy, in 2022, more than 3.5 million people were employed in Russia's platform economy, representing 4.8% of the national population. For 1.6% of the Russian population aged 18–72, platform work was their primary occupation. The most promising area for improving the regulation of platform-based employment lies in the development of voluntary insurance contribution schemes. The role of digital platforms should involve informing platform staff (service providers) about the existing government programs and opportunities for participation, as well as creating user-friendly infrastructure to facilitate such engagement⁸.

⁷ Compiled by the authors.

Sinyavskaya, O. V. Platform-based employment in Russia: assessments, characteristics, and impact on population welfare (T3-177, special project) // Official Website of the National Research University «Higher School of Economics», 2022. – URL: https://isp.hse.ru/projects (accessed 25.12.2024).

10. Regulation of self-regulatory organizations in the field of digital platforms.

The state should encourage digital platform operators to establish self-regulatory organizations for operators of digital platforms in commodity markets and in the field of public and private services. These self-regulatory organizations would develop rules for interaction among platform participants. A self-regulatory organization of digital platform operators assumes part of the regulatory functions: setting compliance criteria for market entry, fostering competition, maintaining registries, monitoring service quality, establishing insurance and self-insurance systems, collecting reports, embedding taxation and dispute resolution mechanisms, and more. Registries of recommended financial and payment services should be established, and services that simplify and standardize reporting for digital platform operators, as well as mechanisms for their protection and support, should be developed.

The state may provide incentives, benefits or subsidies for the development of digital platforms based on the registries of the self-regulatory organizations of digital platforms operating in the most relevant areas of industrial and innovation policy, with the aim of fostering and improving social relations and connectivity.

At the same time, it is important to establish, at the legislative level, that legal entities creating digital platforms should do so in the form of a representative office, a subsidiary business entity, or a non-profit organization. The operator of a digital platform is recognized as the head of the newly established organization.

DISCUSSION

The platform relations between Russia and China are one of the most important aspects of international cooperation in the current conditions of sanctions pressure and the current geopolitical situation. Their development has a significant positive impact on the economies of both countries, which is reflected in the strengthening of strategic partnerships, the improvement of the investment climate, and the increase in the investment attractiveness of both individual sectors and the national economies as a whole.

It should be noted, that the development of bilateral trade and economic relations is based on the creation of special technological and organizational-legal structures aimed at ensuring effective cooperation and coordination between the major economies of Russia and China.

The development of trade and economic relations between Russia and China is based on mutual interests and is driven by objective circumstances. The cooperation between these two major powers not only contributes to the formation of a multipolar world, but also strengthens regional security, the resilience of both countries' economies to sanctions and changes in the global economy.

In general, the potential of the platform economy in Russia and China is diverse and is due to the fact that both countries have significant and sizable bases for rapid growth and subsequent scaling of digital platforms. We can specifically point out the high level of Internet and mobile communication penetration which provides a foundation for the popularization of digital services and mobile applications; the large potential domestic digital markets due to the population size of both countries; the active development of innovation and technology, which is reflected in the existing government programs, aimed at creating a digital model for the national economy, as well as the support for scientific research in this area; the convenient geographical location and developed infrastructure; and the focus not only on the domestic markets of Russia and China, but also on the global market as a whole.

Taking into account the trends of recent years and the increasing need for the development of the platform economy both at the national level and within the framework of international cooperation, its scientific substantiation and the development of theoretical, methodological and methodological aspects are becoming important. The platform economy has significant potential for development, which affects the changing architecture of both national and international economies.

In conclusion, it is essential to emphasize that the mechanisms for regulating platform-based relations, while widely implemented in practice, remain insufficiently formalized at both national and international levels. Given the strategic importance of the developing economic partnership between the Russian Federation and the People's Republic of China and the rapidly evolving digital infrastructures, there is a pressing need to develop solutions for managing platform-based relations.

To address this need, the authors propose robust mechanisms for legal and managerial regulation of platform relations based on the cybernetic approach. The cybernetic model offers a dynamic and integrative framework capable of facilitating interactions between digital platforms across Russia and China, involving transactions, using national digital currencies, insurance, smart contracts, the use of artificial intelligence for drafting, monitoring and enforcing contracts terms.

Furthermore, the article highlights the necessity of establishing self-regulating organizations specific to different types of digital platforms operating in goods and service markets. This measure is particularly relevant in the context of cross-border trade. This would allow for the development of detailed regulations for platform-based relations tailored to each type of digital platform and for the establishment of unified approaches to the content of user agreements. Such a measure is especially relevant in the context of cross-border trade and the need to formalize the rights and obligations of the parties involved in digital transactions.

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